# Adopted by BOSC 2/06

# Revised June 2008

#### **Grade Three**

These guidelines have been designed to assist teachers to focus on what a typical child should know and be able to do at various times in third grade. The third grade mathematics program presents concepts that are introduced, developed or mastered and should be covered using models, explanations, number lines and representations. Problem solving, communication and reasoning are expected to be incorporated throughout the curriculum.

# First Trimester EM Units 1, 2, 3, 4.

#### **Numbers and Operations**

- Write numbers using expanded notation and standard form M (N&O) 3-1
- Inverse relationship between addition and subtraction M (N&O) 3-3
- Addition and subtraction of 3-digit numbers with regrouping M (N&O) 3-3, 3-4
- Relationship between repeated addition and multiplication M (N&O) 3-3
- Properties of multiplication using arrays M (N&O) 3-3
- Multiplication fact concepts for zero, ones, twos, fives and tens M (N&O) 3-4
- Mental computation of addition and subtraction facts to 20 M (N&O) 3-6
- Fact families for addition and subtraction M (N&O) 3-8
- Number properties (addition of odd and even numbers) M (N&O) 3-8
- Field properties for addition (commutative, associative, and identity properties) M (N&O) 3-8
- Introduce division
- Fact families for multiplication and division M(N & O) 3-8

## Geometry and Measurement

- Perimeter of polygons M (G&M) 3-6
- Area of rectangles on grids M (G&M) 3-6
- Time (to five minute intervals) M (G&M) 3-7
- Use positional words and compass directions to give directions from one location to another M (G&M) 3-9
- Identify spatial relationships between locations on map or coordinate grid in 1st quadrant M (G&M) 3-9
- Money-review value, making and counting change

# Functions and Algebra

- Patterns (linear and non-numeric) extended to 3 elements, find missing elements M (F&A) 3-1
- Expressions and solving equations M (F&A) 3-4

# Data, Statistics and Probability

GLEs in italics

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Grade Three Second Trimester EM Units 5, 6, 7, 8,

#### **Numbers and Operations**

- Whole numbers 0-999 M (N&O) 3-1
- Understand equivalencies of whole numbers 0-999 M (N&O) 3-1
- Place value of whole numbers 0-999 M (N&O) 3-1
- Identify, compare, order and represents fractions (halves, thirds, fourths, sixths, eighths) using area and set models M(N&O) 3-1
- Decimals (within the context of money) as part of 100 M (N&O) 3-1
- Connect decimals to money and common fractions M (N&O) 3-1
- Identify equivalent positive fractions (halves, thirds, fourths, sixths, eighths) using models, number lines and pictures M(N & O) 3-2
- Comparison of whole numbers 0-999 M (N&O) 3-2
- Symbolic Representation M (N&O) 3-2
- Mental Math: Whole numbers 0-999 M (N&O) 3-6
- Estimation *M* (*N&O*) 3-7
- Number properties (multiplication of odd and even numbers, and zero property) M (N&O) 3-8
- Field properties for multiplication (commutative and identity) M (N&O) 3-8

### Geometry and Measurement

- Identify, describe, and distinguish among polygons (triangles, squares, rectangles, rhombuses, trapezoids and hexagons) and circles M(G&M) 3-1
- Compose and decompose polygons (triangles, squares, rectangles, rhombuses, trapezoids and hexagons) and circles M(G&M) 3-1
- Use number of angles, number of sides, or length of sides to identify, describe, and distinguish among polygons (triangles, squares, rectangles, rhombuses, trapezoids and hexagons) and circles M(G&M) 3-1
- Line symmetry and congruency concepts M(G&M) 3-4
- Identify similar shapes M (G&M) 3-5
- Copy, compare and draw models of triangles, squares, rectangles, rhombuses, trapezoids and hexagons M (G&M) 3-10
- Build models of rectangular prisms from 3-dimensional representations M(G&M) 3-10
- Measurement-length, temperature, capacity, mass and weight M (G&M) 3-7

# Functions and Algebra

## Data, Statistics and Probability

GLEs in italics

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Grade Three
Third Trimester
EM Units 9, 10, 11

## **Numbers and Operations**

- Add and subtract decimals (within the context of money) M (N&O) 3-4
- Multiplication fact concepts for threes, fours, sixes, sevens, eights, nines, elevens and twelves M (N&O) 3-4
- Multiply whole numbers 1-12 M (N&O) 3-4

## **Geometry and Measurement**

- Calendar patterns (24 hours in day, 7 days in week, 365 days in a year) M (G&M) 3-7
- Measurement-Time (elapsed time in whole and half-hour increments) M(G&M) 3-7

## Functions and Algebra

## Data, Statistics and Probability

- Collect, record, organize, interpret and analyze data to make predictions and answer questions M (DSP) 3-1, 3-3
- Patterns, trends, and distributions in data (mode) M (DSP) 3-2
- Display data (and describe the best representation for the data) on line plots, tally charts, tables or bar graphs M (DSP) 3-3
- Counting techniques (student diagrams, organized lists, tables, tree diagrams, or others) M (DSP) 3-4
- Describe probability of events using "more likely", "less likely", "equally likely", "certain" or "impossible" M (DSP) 3-5
- Make and test predictions using "more likely", "less likely", "equally likely", "certain" or "impossible" M (DSP) 3-5
- Determine if a game is fair M (DSP) 3-5
- Experimental design (survey, observation, experimentation) M (DSP) 3-6